

Company In-Depth

18 December 2006 | 29 pages

ABG Shipyard (ABGS.BO)

Buy: Charting its course

- Initiating with a Buy/Medium Risk (1M) rating** — Our Rs291 target price is based on 12x FY08E fully diluted earnings and provides 29% upside, which should be well supported by an earnings CAGR of 20%. This version corrects the EV/EBITDA figures.
- Well positioned for Growth** — An unexecuted order book of 3x FY07E net sales provides strong earnings visibility. We expect a 20% CAGR over FY06-FY09E driven by a volume growth of 28%. We also believe that FY10 will see a major expansion in ABG's volumes as new capacities are fully utilized.
- Capacity Expansion** — The company's upcoming yard at Dahej should ensure a faster order book execution rate while enhancing the company's capability to manufacture ships up to 120,000 DWT. The facility will also include a rig manufacturing unit.
- Strong Offshore Vessel Market** — Globally, demand for offshore vessels is likely to remain robust. We believe ABG with its expertise in the segment can capitalize on this demand.
- Key Risks** — Key risks to our Buy rating are: 1) implementation delays; 2) withdrawal of government subsidies; 3) a sharp correction in crude prices; and 4) an upturn in the commodity cycle.

Buy/Medium Risk	1M
Price (15 Dec 06)	Rs224.25
Target price	Rs291.00
Expected share price return	29.8%
Expected dividend yield	0.5%
Expected total return	30.3%
Market Cap	Rs11,419M
	US\$257M

Price Performance (RIC: ABGS.BO, BB: ABGS IN)



See page 27 for Analyst Certification and important disclosures.

Figure 1. Statistical Abstract – ABG Shipyards

Year to	Net Profit	EPS	EPS Growth	P/E Price / CF	EV / EBITDA	P / Book	ROE	ROCE	DPS	Div. Yield
	(Rs mn)	(Rs)	(%)	(x)	(x)	(x)	(%)	(%)	(Rs)	(%)
31-Mar										
2005	447	13.8	38.6	16.3	15.2	12.6	4.7	33.6	43.5	0.0
2006	837	16.4	19.4	13.6	13.1	5.7	2.4	26.3	31.7	1.2
2007E	1,032	20.3	23.4	11.0	10.4	6.7	2.0	19.5	22.7	1.2
2008E	1,237	24.3	19.8	9.2	8.3	8.1	1.6	19.4	16.1	1.2
2009E	1,436	32.5	16.1	7.9	6.9	7.5	1.4	18.8	14.0	1.2

Source: Citigroup Investment Research estimates

Deepak Jain¹

+91-22-6631-9852
 deepak3.jain@citigroup.com

Jamshed Dadabhoy¹

+91-22-6631-9883
 jamshed.dadabhoy@citigroup.com

Citigroup Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Non-US research analysts who have prepared this report are not registered/qualified as research analysts with the NYSE and/or NASD.

¹Citigroup Global Market India Private Limited

Fiscal year end 31-Mar	2005	2006	2007E	2008E	2009E
Valuation Ratios					
P/E adjusted (x)	16.3	13.6	11.1	9.2	7.9
EV/EBITDA adjusted (x)	na	7.1	5.8	6.9	7.1
P/BV (x)	4.7	2.4	2.0	1.6	1.4
Dividend yield (%)	0.0	0.5	0.5	0.5	0.5
Per Share Data (Rs)					
EPS adjusted	13.77	16.43	20.27	24.30	28.21
EPS reported	13.77	16.43	20.27	24.30	28.21
BVPS	47.49	94.73	113.66	136.60	163.46
DPS	0.00	1.20	1.20	1.20	1.20
Profit & Loss (RsM)					
Net sales	3,766	5,417	6,707	8,779	11,564
Operating expenses	-2,877	-4,045	-5,014	-6,760	-9,112
EBIT	890	1,373	1,692	2,020	2,452
Net interest expense	-202	-167	-177	-200	-334
Non-operating/exceptionals	1	61	26	26	27
Pre-tax profit	689	1,266	1,541	1,847	2,144
Tax	-241	-430	-509	-609	-708
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	447	837	1,032	1,237	1,436
Adjusted earnings	447	837	1,032	1,237	1,436
Adjusted EBITDA	921	1,409	1,761	2,149	2,668
Growth Rates (%)					
Sales	na	43.8	23.8	30.9	31.7
EBIT adjusted	na	54.3	23.3	19.3	21.4
EBITDA adjusted	na	53.0	25.0	22.0	24.2
EPS adjusted	na	19.4	23.4	19.8	16.1
Cash Flow (RsM)					
Operating cash flow	-181	1,233	-1,119	423	668
Depreciation/amortization	31	36	69	129	217
Net working capital	-851	4	-2,329	-963	-986
Investing cash flow	-96	-623	-2,500	-6,000	-3,000
Capital expenditure	-96	-616	-2,500	-6,000	-3,000
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	371	2,954	1,141	6,936	278
Borrowings	371	420	1,210	7,005	347
Dividends paid	0	0	-69	-69	-69
Change in cash	95	3,564	-2,478	1,360	-2,055
Balance Sheet (RsM)					
Total assets	3,604	10,264	11,846	21,032	24,080
Cash & cash equivalent	487	4,050	1,573	2,932	878
Accounts receivable	1,401	2,399	3,383	4,446	5,596
Net fixed assets	1,000	1,559	3,990	9,860	12,644
Total liabilities	2,061	5,440	6,059	14,076	15,756
Accounts payable	1,004	2,376	2,913	3,906	5,240
Total Debt	730	997	2,207	9,212	9,558
Shareholders' funds	1,544	4,824	5,788	6,956	8,324
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	24.5	26.0	26.3	24.5	23.1
ROE adjusted	na	26.3	19.5	19.4	18.8
ROIC adjusted	na	41.9	24.9	13.4	11.1
Net debt to equity	15.8	-63.3	11.0	90.3	104.3
Total debt to capital	32.1	17.1	27.6	57.0	53.5

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791



Investment Summary

We initiate on ABG Shipyards with a BUY (1L) rating and a target price of Rs291. ABG shipyards as the leading private player in the shipbuilding space and as the world's leading AHTS player, has the capability to capitalize on strong demand for offshore vessels. Its expansion plans and strong order book position make the stock attractive.

Strong Earnings Visibility

Despite higher depreciation and interest expenses, we believe PAT will increase 20% during FY06-FY09, driven by a sales growth of 28%, backed by:

- Unexecuted order book of Rs16bn i.e. about 2.6x FY07E sales.
- Capacity Expansion at the existing yard at Surat. Notably our numbers do not take into account any significant impact of the Dahej yard, which should contribute more significantly in FY10.

Expansion Plans – Reflect confidence in the strong order book

The company plans to expand its capacity at the existing Surat yard by about 40% over the next two years. In addition the New Greenfield capacity at Dahej should lead to a faster orderbook conversion. Post its capacity expansion the company will be able to build larger vessels of a 120,000 DWT as well as rigs. These initiatives are likely to diversify ABG's product mix and make for a more robust and scalable model.

Strong outlook for Offshore Vessels

The outlook for offshore vessels that form the majority of ABG's orderbook remains strong. Key demand drivers – strong E&P expenditure, upgraded technology and an aging fleet – provide a strong demand outlook. We believe ABG can capitalize on this demand.

Valuations

ABG trades at about 9x FY08E earnings – this is at a considerable discount to any of its peer sets i.e. the capital goods sector, Korean shipbuilders as well as the broad market. Given the strong and clearly visible earnings over the next three years we value ABG at Rs291 i.e. 12x FY08E earnings.

Key Risks

Key risks to our Buy rating are: 1) implementation delays; 2) withdrawal of government subsidies; 3) a sharp correction in crude prices; and 4) an upturn in the commodity cycle. Key triggers for the stock include 1) announcement of new orders; and 2) extension of subsidies.

Orderbook – Provides strong visibility

- Unexecuted Order book at c3x FY07E sales extends to FY10.
- Offshore Oil Vessels account for about 50% of the order book. Indian coast guards c25%. Domestic orders c35%, exports 65%.
- New orders for the Dahej yard yet to be booked; new order announcements expected.

ABG's order book of 48 ships is valued at Rs23bn with an unexecuted portion of Rs15.5bn. The order book extends to FY10 and provides a revenue cover of up to three years. The order book is particularly impressive given that capacity for Dahej has not yet been sold. In the near term we expect the company to book new orders.

Orders from First Pacific Shipping not yet reported by the company

Figure 2. ABG Shipyards – Orderbook as reported by Clarksons

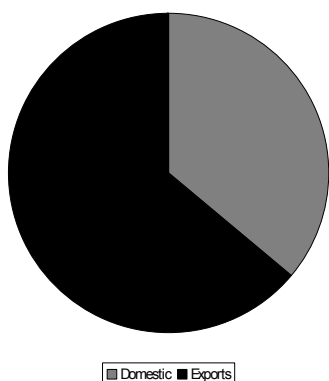
Type	Dwt	Delivery	Contract Date	Current Owner
AHTS	3,000	2008-04	10/11/2006	First Pacific Shpg,
AHTS	3,000	2008-07	10/11/2006	First Pacific Shpg,
AHTS	3,000	2008-10	10/11/2006	First Pacific Shpg,
AHTS	2,000	2007-09	10/11/2006	First Pacific Shpg,
AHTS	2,000	2007-12	10/11/2006	First Pacific Shpg,
Diving Spt	2,100	2008-04	7/1/2006	Vroon B.V.
AHTS	1,600	2006	1/1/2004	Maridive & Oil Serv
AHTS	1,600	2006	1/1/2004	Maridive & Oil Serv
AHTS	1,600	2007	1/1/2004	Maridive & Oil Serv
AHTS	1,600	2007	1/1/2004	Maridive & Oil Serv
AHTS	1,500	2008-01	3/20/2006	Deep Sea Supply
AHTS	1,500	2008-04	3/20/2006	Deep Sea Supply
AHTS	1,500	2008-07	3/20/2006	Deep Sea Supply
AHTS	1,500	2008-10	3/20/2006	Deep Sea Supply
AHTS	1,500	2009-01	3/20/2006	Deep Sea Supply
AHTS	1,500	2009-04	3/20/2006	Deep Sea Supply
AHTS	2,000	2007	3/13/2006	TAG Sealogistics
AHTS	2,000	2007	3/13/2006	TAG Sealogistics
AHTS	2,000	2007	3/13/2006	TAG Sealogistics
Bulk	18,800	2008	1/30/2006	ESL Shipping Oy
Bulk	18,800	2009	1/30/2006	ESL Shipping Oy
AHTS	1,000	2006-09	1/30/2006	Lamnalco Ltd.
AHTS	1,000	2006-12	1/30/2006	Lamnalco Ltd.
AHTS	1,000	2007-08	1/30/2006	Lamnalco Ltd.
AHTS	1,500	2007-09	6/15/2005	Deep Sea Supply
AHTS	1,500	2007-10	6/15/2005	Deep Sea Supply
Diving Spt	1,000	2006-07	3/3/2005	Vroon B.V.
AHTS	1,500	2006-12	12/31/2004	Deep Sea Supply
AHTS	1,500	2007-03	12/31/2004	Scan Geophysical
AHTS	1,500	2007-06	12/31/2004	Scan Geophysical
AHTS	1,500	2007-05	12/31/2004	Scan Geophysical
AHTS	1,000	2007-12	1/1/2006	Lamnalco Ltd.
AHTS	1,000	2008-12	1/1/2006	Lamnalco Ltd.
14 Interceptor boats				Indian Coastguards
Passenger Carrier				Andaman & Nicobar Island

Source: Citigroup Investment Research estimates, Clarksons

ABG's order book is more diversified than its peers like Bharati. Only about 50% is leveraged to the offshore segment, remaining orders include those from the coast guards and fleet vessels. It is constructing two ice breaker vessels each with a capacity of 18,800 DWT. It is the only private sector Indian yard to be able to do this.

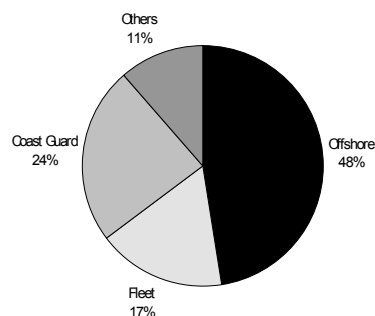
An estimated 36% of the order book is to be delivered FY09 and FY10. Most of these orders have been booked in FY05 and FY06 – in a strong market and hence we believe that margins are unlikely to show any substantial decline.

Figure 3. ABG Shipyards – Order Book by location



Source: Company, Citigroup Investment Research

Figure 4. ABG Shipyards – Order Book by Segment



Source: Company, Citigroup Investment Research

Clarksons has already reported an order for five AHTS with First Pacific Shipping. However, this order has not been confirmed/reported by the company.

Capacity Expansion

- New Greenfield project at Dahej likely to be commissioned by FY09. Capacity to produce vessels up to 120,000 DWT vessels.
- Rig manufacturing capacity underway, over the longer term hopes to produce VLCCs at Dahej.
- Capacity at Surat being de bottlenecked to simultaneously produce 32 vessels.

Dahej to be commissioned by April 2008

ABG shipyards is India's leading private sector shipbuilder. The company has embarked on a capacity expansion program at its yards. It has a yard at Surat and is developing a greenfield project at Dahej in Gujarat. This would enable it to build new, higher-value vessels in these areas.

We believe the expansion plans reflect management's positive outlook. The huge order book (extending into FY10) provides a cushion for capacity utilization in the near term.

Magdala, Surat – The facility along the west coast of Gujarat, is spread across 35 acres. It has 18 berths (previously 15) and can now manufacture 23 ships on a modular basis. With expansion, it should be able to manufacture up to 32

Capacity at Surat being increased by 40%

Dahej will be able to simultaneously build up to 8 vessels with a capacity of 120,000 DWT

Orderbook/ Capacity expansion to drive growth

ships on a modular basis at any given point. This expansion should be complete by FY08. It can construct ships up to 155m and up to 20,000 DWT. The yard also has an indoor facility to build aluminium ships of up to 80metres.

Dahej – The company has also undertaken a new greenfield shipbuilding facility at Dahej. The yard is to be expanded in two phases – the first phase is likely to be operational by April 2008. The initial phase to be spread over 67 acres will have the capacity to build four ships of 120,000DWT each. This phase will involve a capital expenditure of Rs4bn. Over time, Dahej will add the capacity to build an extra four ships. It will also involve the creation a rig manufacturing facility – the company will be raising \$125m early FY08. The yard can be expected run at its full capacity in FY10-11.

Fujairah, UAE – The company acquired this yard through acquisition of Crossocean Ship Repair in January 2006. With the acquisition it will have a presence in the Middle East. Strategically located on trading routes, ABG would like to develop this into a hub catering to repair and service. While the operations are small, this might see an expansion.

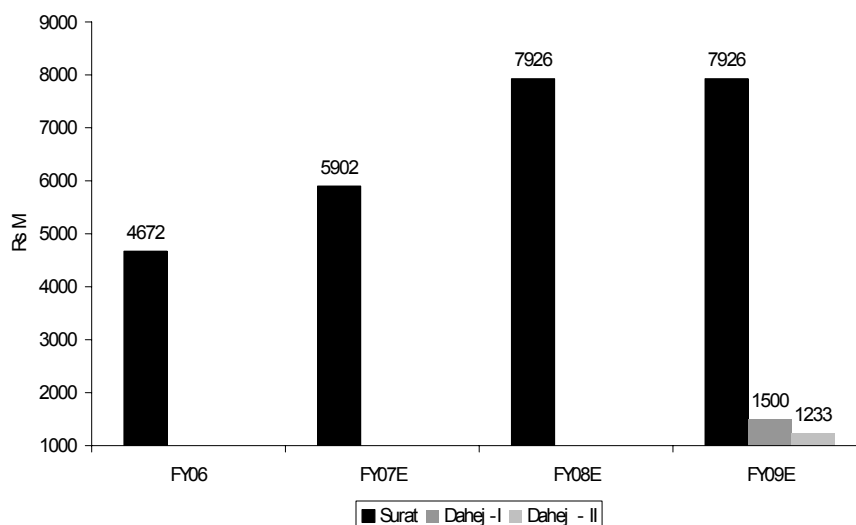
Earnings Outlook

- Profit CAGR of 20%, sales CAGR of 28% between FY06-09E.
- Greater impact to be felt in FY10, when Dahej begins to contribute meaningfully.
- Ex subsidy OPMs to marginally increase, however subsidies as a percent of sales to decline; hence lower operating margins.
- Net profit weighed down by higher depreciation and net interest costs as investments yards payoff in FY10.

Sales – Expect a CAGR of 28%, greater impact of expansion to be felt in FY10

The major impact of ABG's expansion is likely to come in FY10 rather than FY09. The Dahej facility, which will become operational in FY09 will take between 3-4 years to reach its full capacity of modular building of eight ships of 120,000 DWT each (roughly equivalent to Rs7bn per year, assuming a completion period of 18 months). Our sales estimates for Dahej include about Rs1.5bn in FY09. This excludes any income from the rig facility (which could contribute another Rs1.2bn) in FY09. Overall we would expect the Dahej facility to contribute about Rs12bn by 2012.

Figure 5. ABG Shipyards – Contribution by Yard Excluding Subsidy



Source: Citigroup Investment Research estimates, Company

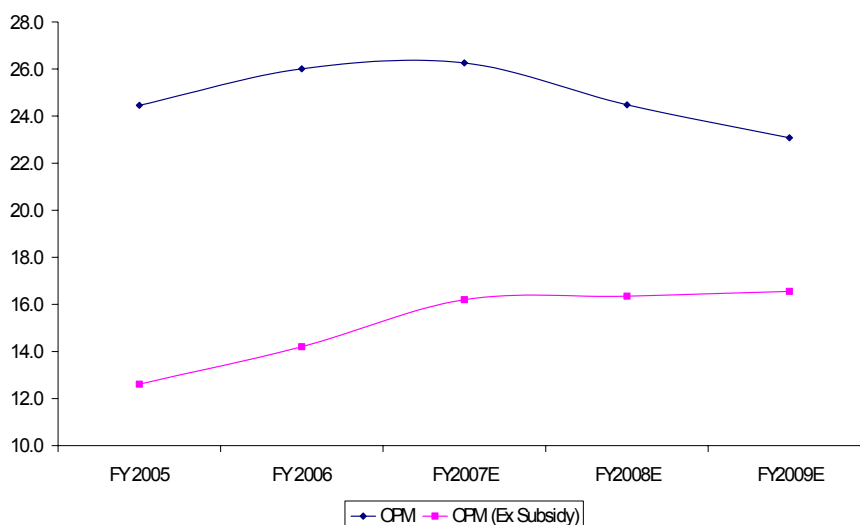
Our combined sales estimates for 2HFY07 to FY09E roughly amount to Rs21bn – which is above the current unexecuted order book of Rs15.5bn. The company is in advance negotiations for the sale of its capacities – we believe new orders should drive the remainder of growth – a single rig order could add Rs7bn to the order book.

Subsidies as a percentage of sales likely to decline as domestic order book is executed

Costs – Small Improvement in margins

While we estimate raw material costs to remain roughly stable, manufacturing expenses might decline marginally. This is largely due to ABG’s repeat customer base – nearly 70% of customers are repeat. This is likely to bring down designing cost (roughly 2-3% of total costs). However, with subsidies declining as a percentage of sales, we expect operating margins to decline marginally.

Figure 6. ABG Shipyards – Operating Profit Margins



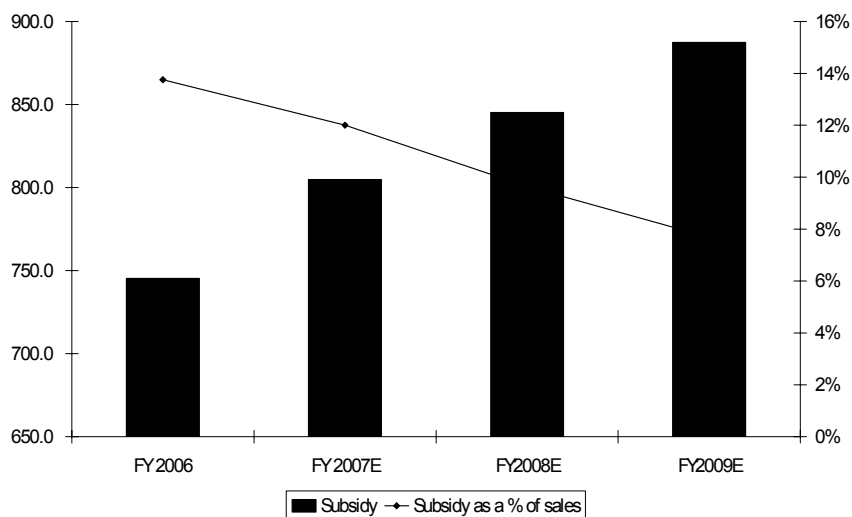
Source: Citigroup Investment Research estimates, Company

PAT – expected to grow at 20% p.a., weighed down by a lower subsidy to sales ratio

We assume no incremental subsidies for the new yards in FY09E.

We expect PAT to grow at a lower rate than the top line. The key reason is a decline in subsidies. *We assume no incremental subsidies for the new yards in FY09E.* In effect our estimates include subsidies only on the existing order book. Domestic orders now comprise about 35% of ABG's orderbook and about 60% of the order book is eligible for subsidies. Going forward, with orders of rigs (not eligible for subsidies) likely to come through and a faster execution of ships from the Navy, we expect the share of subsidies in total sales to decline to 8% in FY09E (from c13% currently). Without subsidies we expect PAT to grow by 36% over the period – faster than the top line.

Figure 7. ABG Shipyards – Subsidy as a percentage of sales

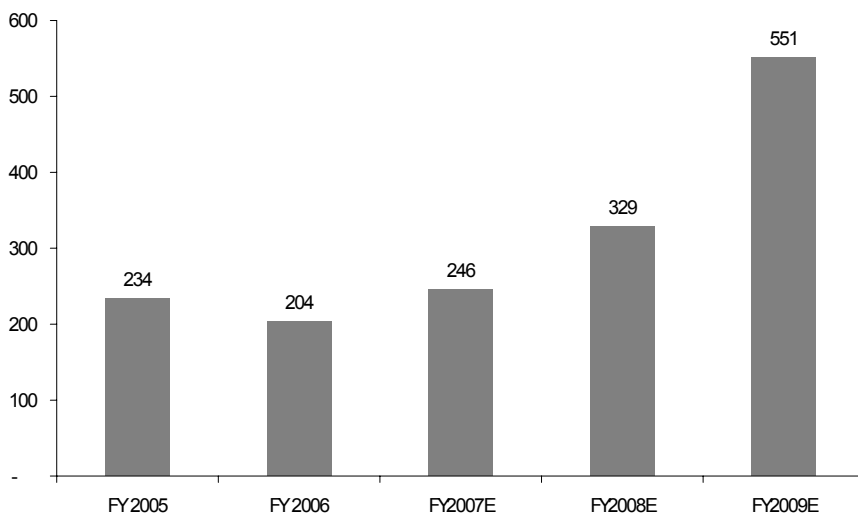


Source: Citigroup Investment Research estimates, Company

With the strong capacity expansion in place we expect interest and depreciation costs to increase substantially. We assume the tax rate will remain broadly at current levels. However, the yard at Dahej *might* fall under an Special Economic Zone (SEZ). Given that Dahej at full capacity it may be expected to contribute far more substantially towards the bottom line, leading to substantial cost savings.

Rising interest and depreciation costs

Figure 8. ABG – Interest and Depreciation Costs



Source: Citigroup Investment Research estimates, Company

Interest costs rise on account of: 1) the higher debt for the expansion 2) The commission and interest paid on bank guarantees and the credit line required for shipbuilding contracts.

Financial Analysis

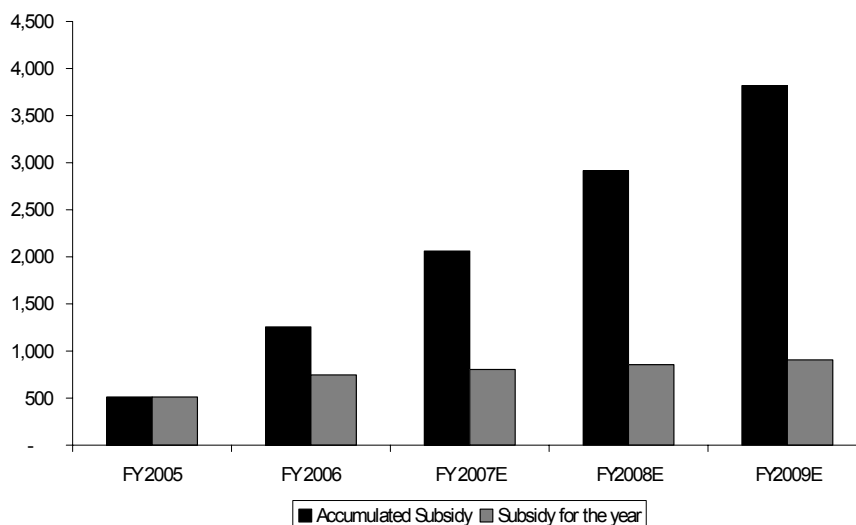
- Return on equity to remain stable, however ROCE could decline as returns from new yards would come through in FY10.
- Working capital hit by the delayed subsidy payments; working capital requirements much lower than its peers like Bharati
- Comfortable debt equity ratio despite new debt raising of US\$125m in FY08.

Working Capital Cycle

The working capital cycle has been extended due to the non-payment of subsidies by the government. While we expect subsidy payments to begin early next year, we do not add them to the cash flow.

We expect subsidies payments to begin early next year

Figure 9. ABG Shipyards – Subsidy is an important component of Working Capital



Source: Citigroup Investment Research estimates, Company

Working Capital c20% of sales

The working capital cycle excluding subsidies is closer to 20% of the ex-subsidy sales i.e. about 90 days. We believe this is a level that will be sustained. This is well below current levels of its peers like Bharati. The key differentiator has been the raw material inventory. While Bharati prefers to purchase the material, ABG enters forward contracts. This reduces working capital requirements; however it *may* have led to higher raw material costs. The contracts typically are in place for one year, while the credit lines are opened immediately.

The company should be able to meet its short-term capital requirements through secured loans which have a lien on the raw material itself.

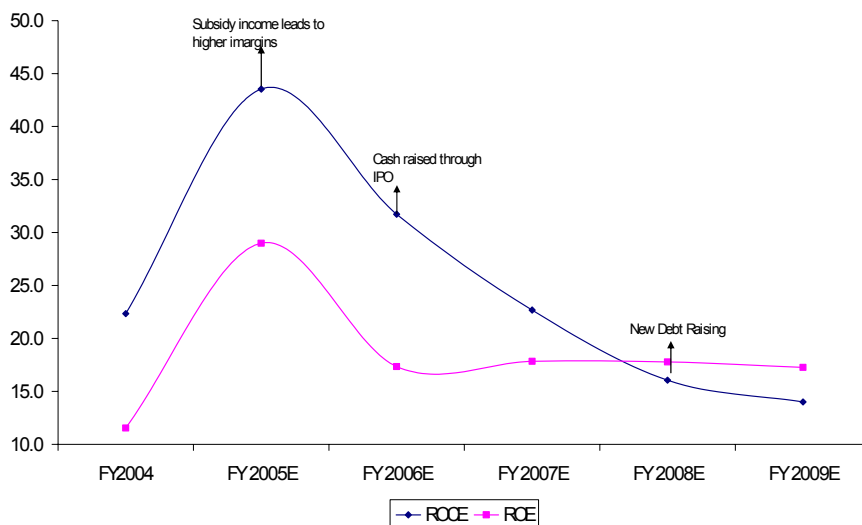
Return Ratios – In an investment phase; expect improvement in FY10

ABG shipyard plans to spend nearly Rs10bn over the next three years to expand its capacities. This involves the Dahej project – as with the profitability returns are likely to be enhanced substantially only from the year FY10 onwards.

To raise debt of \$125m in FY08

The post subsidy ROE of c18% is well below that of its peers like Bharati – this has been due to the capital raising through an IPO rather than FCCB (in the case of Bharati).

Figure 10. ABG Shipyards – Return Ratios

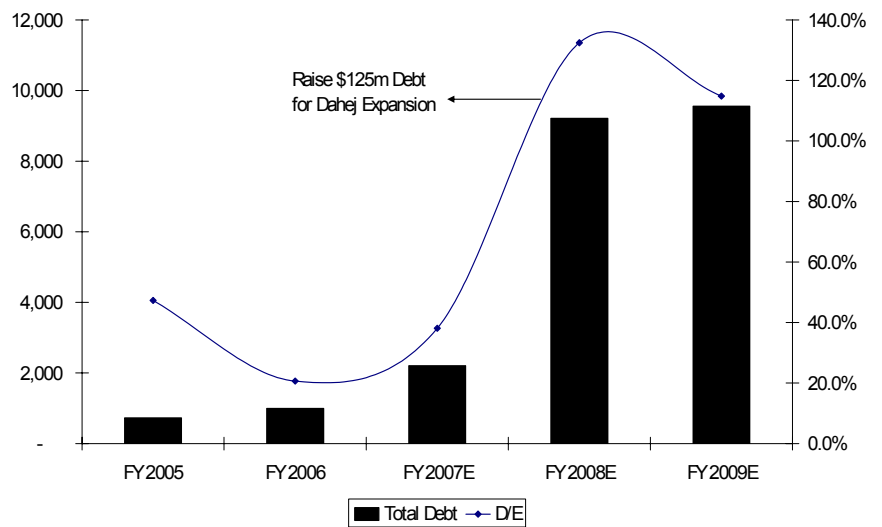


Source: Citigroup Investment Research estimates, Company

Debt to total capital will increase going ahead

The ROCE is likely to show a slump in FY08 and FY09 as the company raises new debt. The debt equity ratio will increase as it raises new debt of US\$125m in FY08.

Figure 11. ABG Shipyards – Debt to Equity



Source: Citigroup Investment Research estimates, Company

Financials

Figure 12. ABG Shipyards – P&L Account, FY05-09E

Year to 31 March	FY05	FY06	FY07E	FY08E	FY09E
Net sales	3,766	5,417	6,707	8,779	11,564
<i>% change YoY</i>	<i>27.4</i>	<i>43.8</i>	<i>23.8</i>	<i>30.9</i>	<i>31.7</i>
Raw material expenses	2,262	3,320	4,090	5,493	7,387
<i>percentage of net sales</i>	<i>60.1</i>	<i>61.3</i>	<i>61.0</i>	<i>62.6</i>	<i>63.9</i>
Manpower expenses	100	130	162	218	293
<i>percentage of net sales</i>	<i>2.7</i>	<i>2.4</i>	<i>2.4</i>	<i>2.5</i>	<i>2.5</i>
Manufacturing expenses	300	351	457	606	794
<i>percentage of net sales</i>	<i>8.0</i>	<i>6.5</i>	<i>6.8</i>	<i>6.9</i>	<i>6.9</i>
Sellin and Distribution expenses	183	207	236	313	421
<i>percentage of net sales</i>	<i>4.9</i>	<i>3.8</i>	<i>3.5</i>	<i>3.6</i>	<i>3.6</i>
Total Operating Costs	2,845	4,009	4,946	6,630	8,895
<i>percentage of net sales</i>	<i>75.5</i>	<i>74.0</i>	<i>73.7</i>	<i>75.5</i>	<i>76.9</i>
EBITDA	921	1,409	1,761	2,149	2,668
Interest	202	167	177	200	334
Other income	1	61	26	27	27
Depreciation	31	36	69	129	217
Pre-Tax Profit	689	1,266	1,541	1,847	2,144
Tax	241	430	509	609	708
Net profit	447	837	1,032	1,237	1,436
Profit Margins (%)					
EBITDA	24.5	26.0	26.3	24.5	23.1
EBIT	23.6	25.3	25.2	23.0	21.2
Effective Tax rate	35.0	33.9	33.0	33.0	33.0
No. of O/S shares (Mils)	32.50	50.92	50.92	50.92	50.92
EPS (Rs)	13.8	16.4	20.3	24.3	28.2
Cash flow / share (Rs)	14.7	17.1	21.6	26.8	32.5
Dividend / share (Rs)	0	1.2	1.2	1.2	1.2

Source: Citigroup Investment Research estimates, Company

Figure 13. ABG Shipyards – Balance Sheet, FY06-09E

Year to 31 March	FY05	FY06	FY07E	FY08E	FY09E
Share capital	325	509	509	509	509
Reserves and surplus	1,219	4,315	5,278	6,447	7,815
Share holders equity	1,544	4,824	5,788	6,956	8,324
Secured loans	730	997	1,207	1,612	2,158
Unsecured loans	-	-	1,000	7,600	7,400
Total Borrowings	730	997	2,207	9,212	9,558
Total Capital	2,552	6,488	8,661	16,835	18,549
Net Fixed Assets	1,000	1,559	3,990	9,860	12,644
Investments	-	7	7	7	7
Current Assets					
Inventories	717	2,249	2,894	3,786	4,956
Accounts Receivable	129	58	73	96	127
Cash and Bank Balances	487	4,050	1,573	2,932	878
Loans and Advances	1,271	2,341	3,309	4,350	5,469
Total Current Assets	2,605	8,698	7,849	11,164	11,429
Current Liabilities					
Accounts Payable	1,004	2,376	2,913	3,906	5,240
Others	7	1,238	-	-	-
Provisions	42	162	271	291	291
Total Current Liabilities	1,052	3,776	3,185	4,197	5,531
Net Current Assets	1,552	4,922	4,664	6,967	5,898
Total Assets	2,552	6,488	8,661	16,835	18,549
Key Ratios					
NAV (Rs)	47.5	94.7	113.7	136.6	163.5
Total debt / Equity (%)	47.3	20.7	38.1	132.4	114.8
ROE (%)	33.6	26.3	19.5	19.4	18.8
ROCE (%)	43.5	31.7	22.7	16.1	14.0

Source: Citigroup Investment Research estimates, Company

Figure 14. ABG Shipyards – Cash Flows, FY05-09E

	FY05	FY06	FY07E	FY08E	FY09E
Net Profit Before Taxation	688.8	1266.4	1540.9	1846.5	2144.0
Depreciation	31.3	36.2	68.7	129.4	216.9
Dividend Received	0.0	-5.5	-6.0	-6.5	-6.5
Finance Charges	202.4	167.3	177.4	199.7	334.1
Operating Profit before WC	922.7	1466.3	1781.0	2169.1	2688.5
Inventories	-868.4	-3183.9	-1849.5	-2458.6	-3205.8
Trade Receivables	59.9	71.8	-15.8	-22.7	-30.5
Trade Advances	-945.5	-1149.0	-967.7	-1040.4	-1119.7
Trade Payables	-209.8	2625.4	-700.4	992.3	1334.1
Stage Payments from Customers	1112.5	1639.5	1204.9	1566.3	2036.2
Direct Taxes Paid	-49.7	-75.4	-399.5	-589.4	-707.5
Cash Flow From Operating Activities	21.7	1394.7	-947.2	616.6	995.2
Cash Flow From Investing Activities					
Purchase of fixed assets	-95.8	-616.7	-2500.0	-6000.0	-3000.0
Other Investments		-7.0	0.0	0.0	0.0
Dividend Received	0.0	5.5	6.0	6.5	6.5
Dividends Paid			-68.7	-68.7	-68.7
Cash Flow From Investing Activities	-95.5	-617.9	-2562.7	-6062.2	-3062.2
Cash Flow From Financing Activities					
Issue of Share Capital		2534.2	0.0	0.0	0.0
Long Term Borrowings			1000.0	6600.0	-200.0
Short Term Borrowing	409.9	266.9	209.7	404.9	546.6
Loans	-38.8	153.0			
Finance Charges	-202.4	-167.3	-177.4	-199.7	-334.1
Cash Flow From Financing Activities	168.7	2786.7	1032.3	6805.2	12.5
Change in Cash	94.9	3563.6	-2477.6	1359.6	-2054.6

Source: Citigroup Investment Research estimates, Company

Valuations

- We value ABG at 12x FY08E fully diluted EPS versus the current valuation of 9x FY08E earnings.
- Its closest peer set is smaller Singaporean shipyards that have a similar size and product profile. Indian yards trade at a c45% discount to this peer set.
- Trades at a discount to Korean shipbuilders and the Indian capital goods sector.
- Underperformance recently given: 1) subsidies 2) global shipbuilding prices. These concerns have been overdone, in our view.

We rate ABG shipyards Buy/Medium Risk (1M). We value ABG shipyards at Rs291 which is 12x FY08E earnings. This is inline with our methodology of rating Indian Shipbuilders. At our target price, ABG would provide an upside of 29% from current levels.

We value the Indian Shipbuilders at 12x FY08E fully diluted EPS. The yards trade at a substantial discount to shipyards that have a similar order book profile, the Korean Shipbuilders and the Indian capital goods sector. We believe smaller Singaporean shipyards, which are of a similar size and produce similar offshore vessels are the ideal peer set for the Indian companies. However, we do look at the Korean shipyards and the Indian capital goods sector for indicative purposes.

Comparison with shipyards with similar order book profiles

ABG Shipyard trades at 9x FY08E earnings. Amongst the closest global peer set for Indian companies we include Jaya Holdings (3rd largest AHTS order book in the world), Labroy Marine (4th largest AHTS shipbuilder), Pan United (5th largest) and Keppel Corp. Although Keppel is geared towards the rig segment we include it in our valuation set as the Indian shipyards aim to enter the rig segment.

The peer set trades in a band of 12.3-16.4x FY08E earnings vis a vis 9x for the Indian Shipbuilders

This peer set trades in a 12.3-16.4x FY08E earning band – a substantial premium to Indian companies. Even allowing for the uncertainty regarding subsidies, we believe this premium is not entirely justified given the strong growth rates and expansion plans of Indian shipbuilders.

Figure 15. Similar Profile Shipyards – Relative Valuations

Company	MCAP (USD)	P/E (FY08E)
Jaya Holdings	729	14.3
Labroy Marine	981	12.3
Pan United Marin	217	16.4
Keppel Corp	8,959	15.6
Average	10,886	14.6
Bharati Shipyards	151	9.0
ABG Shipyards	248	9.2

Source: Citigroup Investment Research estimates, Bloomberg Estimates, DataCentral

Comparison with Korean builders

ABG trades at a c10% discount to larger Korean Shipyards. However, we believe the Korean Shipyards are not in the correct peer set for Indian builders due to the difference in product profile. Korean shipbuilders produce large LNG tankers and are more likely to be affected by a change in global trends than the Indian players that cater to niche segments.

Figure 16. Korean Shipbuilders – Relative Valuations

Company	MCAP (USD)	P/E (FY08E)
Hyundai Heavy Industries	10,463	8.4
Samsung Heavy Industries	5,543	11.3
Hyundai MIPO Shipyards	2,753	12.3
Daewoo Shipbuilding	5,820	8.0
Average	24,579	10.0
Bharati Shipyards	151	8.7
ABG Shipyards	248	8.6

Source: Citigroup Investment Research estimates, Bloomberg

Further, our Korean Shipbuilding analyst Sokje Lee values the Korean shipyards at c15x FY08E earnings, which is at a substantial premium to the Indian shipbuilders.

Comparisons with Indian capital goods sector

ABG is a young company and hence any comparison with historical trading bands is not possible. Shipbuilders are similar to the capital goods sector with respect to the long order book cover. However, they differ in terms of the

business dynamics – 1) capacities for production/ business implementation can easily be expanded 2) capital good companies broadly cater to the domestic Indian market rather than the global sector.

Our peer set of companies in the capital goods sector are valued at an average P/E of 22x with a similar growth profile – the extent of discount again seems unqualified.

Figure 17. Capital Goods Companies – Relative Valuations

	P/E (08E)	EPS CAGR (06-09E)
L&T	25	29%
BHEL	22	27%
Suzlon	21	39%
Average	22	32%
Bharati	9	41%
ABG	9	20%

Source: Citigroup Investment Research estimates, Bloomberg

Going several key triggers could drive valuations:

- Announcement on continuation/payment of subsidies – with ABG having received in-principal approval for Rs400m, we believe the announcement should be soon.
- New order inflows – We expect order announcements for its Dahej yards in the next 2-3 months.
- Timely commissioning of the Dahej yard.

Risks

We rate ABG Shipyards Medium Risk. This is different from our quantitative rating of High Risk. We believe the lower rating is justified given the following factors:

- Strong order book cover c3x FY07e sales. This provides a relatively stable earnings and growth visibility at least for the next three years.
- The company's niche – the offshore segment seems to have strong demand drivers in place.

Being a small shipyard in the global context, ABG is subject to industry-wide risk factors that include a rise in raw material costs, a substantial decline in the global oil prices and a steep rise in global ship building capacity. Further, global macro economic variables such as a decline in GDP growth rates or a decline in sea trade could hit ABG Shipyards.

Company Specific Risks

Capacity Expansion not backed by orders

ABG has been actively expanding its yards and facility. However, the capacity expansion has not been adequately backed by orders. While it maybe a bit early to expect orders, a sudden change in the global situation would adversely

impact ABG. Any new announcements for orders would be a strong trigger for upward valuations.

Execution Risks

ABG will produce a new type of ship, such as jack-up rigs. While it has international partners for support, cost and time overruns in the initial stages of the learning curve cannot be ruled out. Further, performance guarantees are typically in place for six months – any below par performance could lead to financial penalties. Besides the financial impact, it would adversely affect the company's reputation with a loss of potential orders.

Industry Risks

Subsidy retraction by the government

Without government subsidies, ABG's net profit would be reduced by c50% in FY07E. We believe subsidies would affect profitability only if it is removed and infrastructure status is not granted. Please refer to the appendix for details.

Decline in Oil Prices

Demand for offshore vessels is affected by the E&P budgets of oil companies. The E&P budgets are in turn determined by the *expected long-term* fuel prices. A sustained and continuous decline in oil prices would negatively impact demand for offshore vessels which account for nearly 70% of ABG's orderbook.

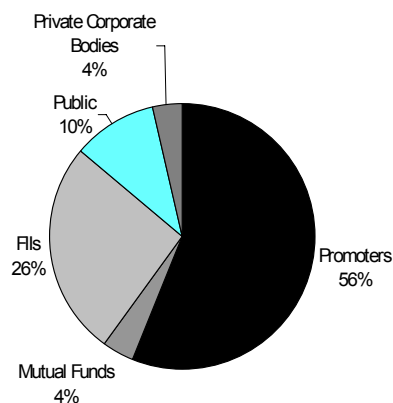
Company Background

ABG, the largest private sector yard in India has built over 90 ships since 1990. It has a shipbuilding facility in Magdala, near Surat in Gujarat. It is in the process of setting up a new shipyard at Dahej and expanding its capacity in Surat. The first phase of the Dahej shipyard, being built at a cost of Rs4bn, will have capacity to build ships of up to 1,20,000 DWT. At Dahej it will also be able to build rigs – a large-ticket profitable segment.

Management and Shareholding

ABG was promoted by Mr. Rishi Agarwal and Mr. Saket Agarwal who hold 56% stake in the company. Rishi Agarwal, the managing director holds an MBA degree and has a vast experience in the sector, as has most key personnel.

Figure 18. ABG Shipyards – Shareholding Pattern



Source: Citigroup Investment Research, BSE

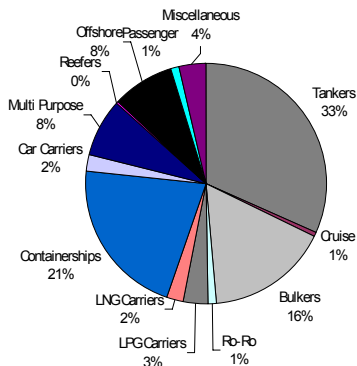
Appendix 1 – OSV market: Initial Successes; Bright Future

- About 65% of the private shipbuilders' order book is geared towards the oil & gas sector; globally India has one of the largest AHTS order books.
- India's prominence in the sector is due to: 1) unfeasibility of producing niche vessels in large shipyards; and 2) availability of skilled labour.
- Demand drivers for OSVs, namely E&P expenditure, average fleet age and technological advancements, remain favourable.

Offshore vessels account for 8% of the world orderbook, while they contribute close to 46% of India's order book

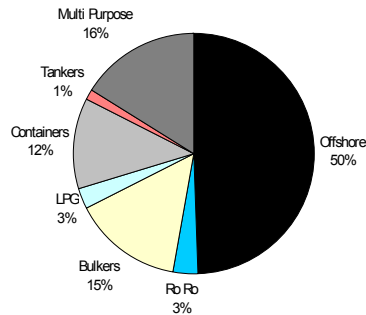
India has been extremely successful in the OSV markets. Bharati and ABG shipyards are amongst the top yards in terms of number of AHTS order book. While offshore vessels account for 8% of the world orderbook, they contribute close to 46% of India's orderbook.

Figure 19. World – Order Book (number of ships)



Source: Citigroup Investment Research

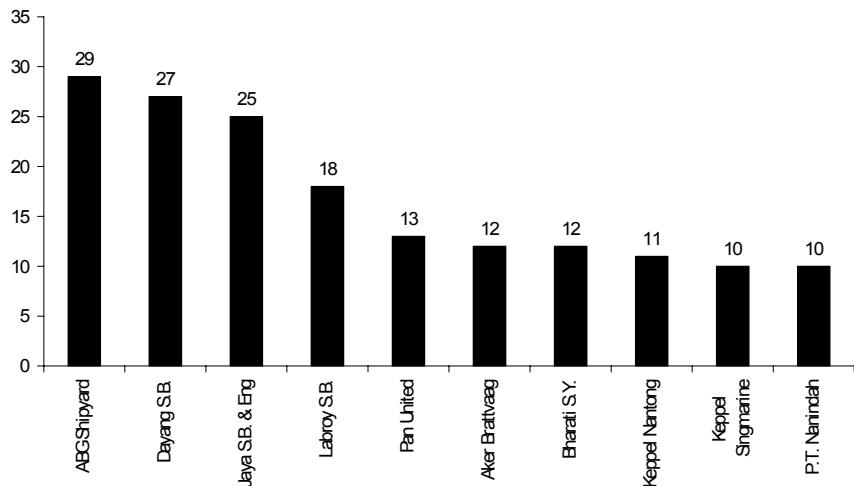
Figure 20. India – Order Book (number of ships)



Source: Citigroup Investment Research

In fact a look at the OSV market shares by countries shows a clear shift towards countries without a strong shipping histories. Shipyards from India, China and Singapore dominate the list of the top 10 shipyards by AHTS order book. India's ABG has the highest orderbook for AHTSs worldwide.

Figure 21. AHTS orderbook – Top 10 Yards



Source: Clarksons

We believe the success of the Indian builders in this segment has been due to two key factors:

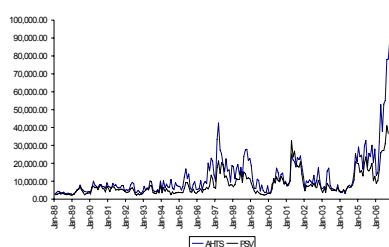
- **Bigger yards find it unfeasible to produce OSV:** The yards at major shipbuilding countries such as Korea and Japan have capacities where the production of OSVs would have been uneconomical. In addition, major shipyards in the world have huge order backlogs from the cargo vessels

(which are priced much higher), forcing OSV owners to look towards newer shipyards. Hence, the shift towards countries such as India.

- **Capitalizing on skilled labour:** The OSV segment utilizes one of India's key advantages – lower *skilled* labour costs. OSVs require a higher degree of technological skill than vessels in the tanker/bulk segments. This helped India succeed against the more competitive Chinese shipbuilders that have been able to build plain vanilla tanker vessels, which are more labour intensive.

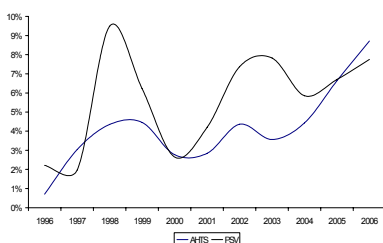
We also believe production of OSVs could be a stepping stone towards building higher tonnage vessels. India lacks a strong reputation for shipbuilding. Once the shipyards can earn a reputation for timely and quality building we expect them to migrate towards higher tonnage ships. In fact, this impending shift can be seen in the capacity expansion programs of ABG and Bharati. They are clearly looking at expanding their capacities substantially – ABG plans to be able to build ships up to 1,20,000 DWT at its shipyard in Dahej.

Figure 22. OSV Rates – Reflecting Strong Demand



Source: Citigroup Investment Research

Figure 23. Orderbook as a percentage of fleet



Source: Citigroup Investment Research

OSV segment – Strong growth prospects

Key demand drivers for the Offshore Supply Vessels are largely favourable. The strong E&P spending, *expected* crude prices, increasing requirements of vessels per rig and an aging fleet should drive growth going forward.

Expected Crude Prices: E&P activities dictate demand for OSVs. The E&P budget is a direct function of *expected* crude oil prices. Typically an expectation of higher oil prices leads to a surge exploration activity. Exploration activities now take deep within the seas with floating production facilities (or rigs). This consequently increases the demand for OSVs that are used to service these markets. As per the survey done by our global analyst Geoffrey Kiebertz only a decline in oil prices below the \$42 levels could bring down the global E&P budgets and consequently decrease demand for offshore vessels.

Figure 24. What Oil Price in Next Six Months Would Be Required to Alter Current Spending Plans by 10% (Question to oil companies in the E&P Survey by Geoff Kiebertz)

	10% Decrease For		10% Increase for	
	2006	2007E	2006	2007E
US Independents	\$41.36	45.91	77.14	75
Canada	44.58	45	77.5	71.36
Outside North America	36.11	33.75	83.33	76.67
Worldwide	42.08	42.71	78.16	74

Source: Citigroup Investment Research estimates

Strong E&P expenditure: The outlook for spending also remains positive – the E&P budgets are expected to increased by 22% in FY06. This is the 7th consecutive year of an increase in E&P budgets.

Figure 25. World – E&P Expenditure remains strong (US\$ M)

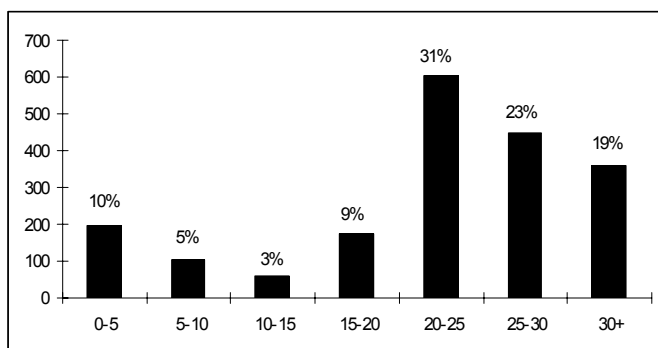
	2005A	2006E	% Change
US Independents	34,370	44,280	28.8%
US Majors	14,812	17,974	21.3%
US Total	49,182	62,254	26.6%
Canada	25,570	27,777	8.6%
Outside North America	132,269	162,994	23.2%
Worldwide	207,021	253,025	22.2%

Source: Citigroup Investment Research estimates

Number of vessels/ rig: Demand for OSVs depends on the number of vessels required to service a rig. New, more advanced rigs (4th and 5th generation) has a drilling speed which is three times that of older rigs. A higher drilling speed leads to a demand for a greater number of service vessels. Currently it is estimated that about 1.75 vessels per day are required for a floating rig – this could increase going forward.

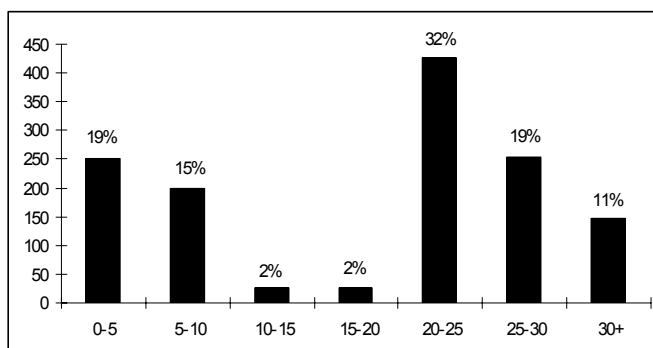
Profile of the Fleet: Like all vessels, OSVs have a fixed life span beyond which operation become uneconomical. The typical lifespan of an AHTS is about 20 years. As the graph shows about 73% of the AHTS fleet and 62% of the PSV fleet is over 20 years old – these vessels were ordered in the oil boom of 1973 and 1979. During this period oil prices increased from \$1 to \$10/barrel in 1973 and \$40/barrel in 1979. Between the late 1980's and late 1990's virtually no OSVs were ordered. Hence the skewed age profile. Despite this the order book currently forms below 10% of the current fleet – clearly indicating a huge potential.

Figure 26. AHTS Fleet – Age Profile



Source: Clarksons, Citigroup Investment Research estimates

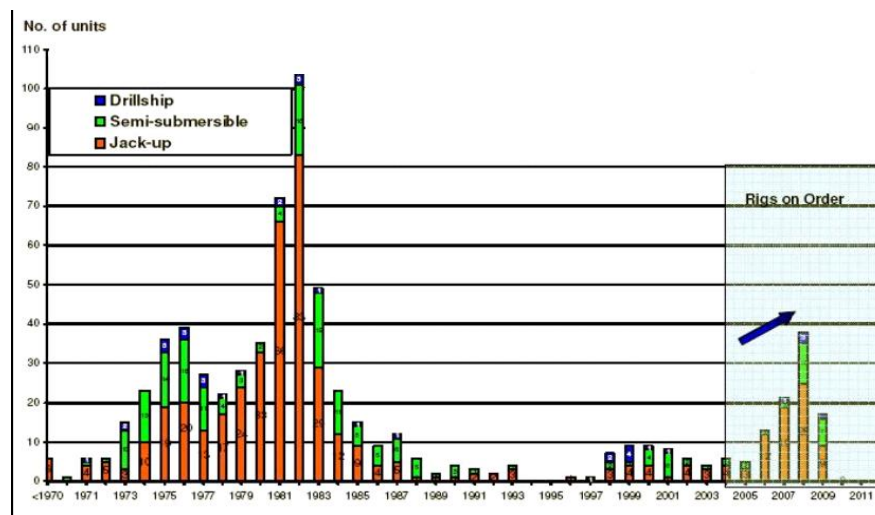
Figure 27. PSV Fleet – Age Profile



Source: Clarksons, Citigroup Investment Research estimates

Jack-up rigs are a new area where Indian shipbuilders – notably ABG and Bharati shipyards – have entered. Just like the OSVs rigs are also a direct play on the E&P cycle. The fleet development of rigs has been very similar to that of OSVs with deliveries peaking in during the boom of the 1980's and the sudden fall in demand immediately later. As pointed out the newer oil rigs (4th and 5th generation) being 3-4 times faster than older drilling rigs the replacement demand will also be higher.

Figure 28. World – Rigs on Order



Source: SembCorp, ODS PetroData

Over 90% of the jack-up rigs are over 20 years old.

As the above graph shows, over 90% of the jack-up rigs are over 20 years old. This has not only enhanced the funds required for repairing but also enhanced downtime. Hence we expect strong replacement demand. An estimated 350 rigs are over 20 years old but only 70 are under construction – deliveries of these are well into FY09; hence we expect strong demand extending into the next decade.

Appendix 2 – Subsidy: Infrastructure Status would be as good

- Subsidies account for c50% of the profitability of Indian builders like Bharati and ABG.
- Calculations suggest a shift from outright 30% subsidies to granting "infrastructure status" to the industry would be equally beneficial.
- The grant of infrastructure status would also improve cash flows as no company has yet received subsidies.

In 2002, the government announced a policy of providing subsidies to private sector shipbuilding companies. The policy guidelines however, came through only in mid 2003. The policy was introduced for a five-year period ending July 2007. The government was to provide 30% of the sale price on all ships for foreign orders. Ships on domestic orders would however be eligible for subsidies if: 1) the vessels were a minimum of 80 metres; and 2) the orders are won through a global tendering process.

While technically the sales price of the ship value is to be used for the subsidy calculation; the sales price is evaluated by a DGCA committee. This committee evaluates the sale price and may alter the ship value before awarding an in-principal approval. Historically in-principal approval has been marginally below the sales price. For private players the subsidy payment is made only after the delivery of the ship; while the payment to the public sector yards is stage-based.

No private player has actually received cash subsidy

Following the in-principal approval, a budget is sanctioned after which final payout is made. It is noteworthy that *no private player has actually received any subsidy till date*. However, ABG has recently received a budget approval for some of the ships delivered and is confident of an actual cash payment in the coming months.

The tremendous margin growth of private players since 2005 has largely been due to subsidies (we estimate that losing subsidies would reduce the FY08E PAT of Bharati and ABG by about 44% and 51% respectively). Hence the continuation of subsidies beyond August 2007 assumes significance.

The industry expects the subsidy is likely to extend beyond 2007 till at least 2012. Further subsidy is available on all ships contracted before 2007 – hence the order book that will power growth in FY08 and FY09 will receive the subsidy benefit.

Very little difference between subsidy and infrastructure status

We also see a possibility of the subsidy being removed and shipbuilding receiving an infrastructure status. We analysed the profitability of a typical shipbuilder receiving subsidy, not receiving subsidy and one with infrastructure status.

Figure 29. India – Subsidy & Infrastructure Status

	With Subsidy	With Infrastructure Status	Without Subsidy	Comments
Sales	100	100	100	Sales without subsidy
Raw Material	60	57	60	About 60% of total sales value
- Domestic	21	18	21	Infrastructure Status Benefit : 16% excise duty benefit on domestic purchases
- Imported	39	39	39	
Other Expenses	23	19	23	Infrastructure Status Benefit : 4% CST benefit
EBITDA	17	24	17	
Value of Subsidy	15	0	0	Subsidy at an average of 15% of sales
Adjusted EBITDA	32	24	17	
Interest Charges	3.5	3.2	3.5	Infrastructure Status Benefit : Interest costs could be about 10% lower
Depreciation	1	1	1	
Other Income	0.5	0.5	0.5	
PBT	28	20.7	13	
Tax	9.2	2.5	4.3	Infrastructure Status Benefit : Pays only MAT instead of the regular 33% tax rate
PAT	18.8	18.2	8.7	Net difference between subsidy status and Infrastructure Status negligible

Source: Citigroup Investment Research estimates

Cash flows will increase if infrastructure status is granted

We believe the profitability will be largely unchanged for the company with infrastructure status vis a vis with subsidy. Further, it would imply *immediate* accretion to the company's cash flow (vis a vis a long delayed subsidy payment).

ABG Shipyards

Company Description

ABG, the largest private sector yard in India has built more than 90 ships since 1990. It has a shipbuilding facility in Magdala, near Surat in Gujarat. It is now setting up a new shipyard at Dahej and expanding its capacity in Surat. The first phase of the Dahej shipyard, being constructed at a cost of Rs4bn, can build ships with a capacity of up to 120,000 DWT. At Dahej, it can build rigs – a large-ticket profitable segment.

Investment Summary

ABG is India's leading private shipbuilder and has the world's largest AHTS (Anchor Handling Tug) order book. The company has a strong earnings visibility with a robust order book of Rs23bn (unexecuted portion of Rs15.5bn), to be executed until FY10. The company has strong expansion plans at its existing yards at Surat where it plans to increase capacity by 40%. Its new Greenfield yard at Dahej, which will be commissioned in April 2008, will have capability to produce ships up to 120,000 DWT. In its second phase of expansion, the yard would also have a rig-building facility. This should increase the orderbook execution rate and provide an entry into new shipbuilding segments. With earnings CAGR of 20% over FY06-09E, we believe current valuations are attractive.

Valuation

We rate ABG Shipyards Buy/Medium Risk (1M). We value ABG Shipyards at Rs291, which is 12x FY08E earnings. This is in line with our methodology for rating Indian shipbuilders. At our target price ABG provides 29% upside from current levels. The current valuations at 9x FY08E earnings are at a substantial discount to the smaller Singaporean yards. These include Jaya Holdings, Lebroys Marine, Pan United Marine and Keppel, which have order book profiles that most closely match that of ABG; trade at an average of 14.6x FY08E. ABG also trades at a discount to Korean shipyards (10x FY08E) and is substantially cheaper than the Indian capital goods companies (20x FY08E). We believe the valuations will be supported by earnings growth of 20% CAGR for FY06-09E. The strong orderbook provides comfort to the valuations.

Risk

We rate ABG Shipyards Medium Risk, which differs from our 260 day quantitative rating of High Risk. We believe, the lower rating is justified given the strong order book cover of c3x FY07E sales and the offshore segment seems to have strong demand drivers in place. Being a small shipyard in the global context, ABG is subject to industry-wide risk factors that include a rise in raw material costs and a steep rise in global ship building capacity. Key risks include: (1) removal of subsidies; (2) declining oil prices; and (3) execution risk.

Bharati Shipyards

Company Description

Set up in 1973, Bharati Shipyard is one of the largest private shipyards in India. From its shipyards, spread across three regions – Ratnagiri, Ghodbunder and Goa – the company has built ships including OSVs, cargo ships and a wide range of tugs/deepwater trawlers. It is setting up a new shipyard in Mangalore and expanding its capacity in Ratnagiri. It recently bagged an order to build a jack-up rig – a first for any Indian shipyard. It has an unexecuted order book of Rs18bn. The company had an initial public offering in May 2004 and subsequently raised \$100m through an FCCB in Dec 2005.

Investment Summary

Bharati has strong earnings momentum and an order book of c5x FY07E sales. It is our preferred pick in the Indian Shipbuilding space. We initiate on Bharati Shipyards with a Buy/Medium risk (1M) rating and target price of Rs421. Our stance is backed by solid 41% earnings CAGR for FY06-FY09E. The company's order book of Rs23bn (unexecuted portion of Rs18bn) is heavily geared towards the oil & gas segment, which has strong demand drivers. The company recently bagged an order for a jack-up rig – the first for an Indian company. Its aggressive expansion plans are backed by its strong orderbook. The company will expand its capacity at Ratnagiri by 20%, while its new yard at Mangalore should generate revenues in FY08. The Mangalore yard can produce ships of 60,000 DWT and also house the rig building unit. Current valuations are attractive.

Valuation

We rate Bharati shipyards Buy/Medium Risk (1M) with a target price of Rs421, or 12x FY08E earnings. The valuation accounts for complete conversion of the FCCB – leading to a 42% dilution in earnings. This is in line with our methodology of rating Indian shipbuilders. At our target price ABG would provide 35% upside from current levels. The current valuations at 9x FY08E earnings are at a substantial discount to the smaller Singaporean yards. Singaporean yards including Jaya Holdings, Lebroy Marine, Pan United Marine and Keppel have an order book profile that most closely matches that of Bharati; and trade at an average of 14.6x FY08E. ABG also trades at a discount to Korean shipyards (10x FY08E) and is substantially cheaper than the Indian capital goods companies (20x FY08E). With a profit growth of 41% CAGR expected between FY06-09E, we believe valuations remain conservative. The robust orderbook at c5x FY07E sales would provide greater comfort.

Risk

We rate Bharati shipyards Medium risk based on our global quantitative analysis. Being a small shipyard in the global context, Bharati is subject to industry-wide risk factors that include a rise in raw material costs and a steep rise global ship building capacity. Further, global macro economic variables such as a decline in GDP growth rates or a decline in sea trade could adversely impact Bharati Shipyards. Key risks include (1) removal of subsidies; (2) declining oil prices; and (3) execution risk.

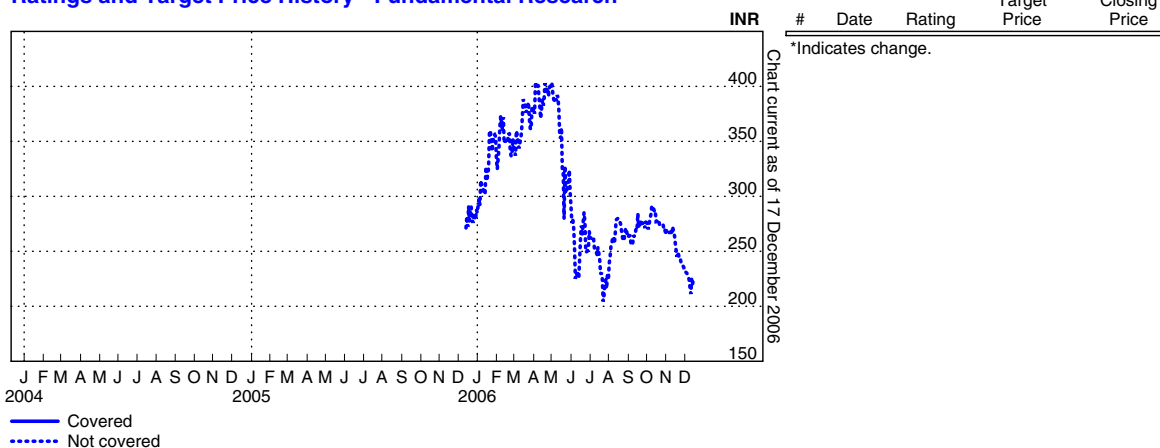
Analyst Certification Appendix A-1

We, Deepak Jain and Jamshed Dadabhoy, research analysts and the authors of this report, hereby certify that all of the views expressed in this research report accurately reflect our personal views about any and all of the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

IMPORTANT DISCLOSURES

ABG Shipyard Ltd (ABGS.BO)

Ratings and Target Price History - Fundamental Research



Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Bharati Shipyard Ltd and Hyundai Mipo Dockyard Co Ltd. This position reflects information available as of the prior business day.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Bharati Shipyard Ltd and Daewoo Shipbuilding & Marine Engineering.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from Daewoo Shipbuilding & Marine Engineering.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Daewoo Shipbuilding & Marine Engineering, Hyundai Heavy Industries Co Ltd, Hyundai Mipo Dockyard Co Ltd and Samsung Heavy Industries Co Ltd in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as investment banking client(s): Bharati Shipyard Ltd and Daewoo Shipbuilding & Marine Engineering.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, securities-related: Daewoo Shipbuilding & Marine Engineering, Hyundai Heavy Industries Co Ltd, Hyundai Mipo Dockyard Co Ltd and Samsung Heavy Industries Co Ltd.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, non-securities-related: Daewoo Shipbuilding & Marine Engineering.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability, which includes revenues from, among other business units, the Private Client Division, Institutional Sales and Trading, and Investment Banking.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citigroup Investment Research product ("the Product"), please contact Citigroup Investment Research, 388 Greenwich Street, 29th Floor, New York, NY, 10013, Attention: Legal/Compliance. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at www.citigroupgeo.com. Private Client Division clients should refer to www.smithbarney.com/research. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

Citigroup Investment Research Ratings Distribution

Data current as of 30 September 2006

	Buy	Hold	Sell
Citigroup Investment Research Global Fundamental Coverage (2914)	46%	40%	14%
% of companies in each rating category that are investment banking clients	44%	43%	32%
India -- Asia Pacific (105)	59%	16%	25%
% of companies in each rating category that are investment banking clients	52%	65%	38%
South Korea -- Asia Pacific (55)	38%	29%	33%
% of companies in each rating category that are investment banking clients	14%	19%	17%

Guide to Fundamental Research Investment Ratings:

Citigroup Investment Research's stock recommendations include a risk rating and an investment rating.

Risk ratings, which take into account both price volatility and fundamental criteria, are: Low (L), Medium (M), High (H), and Speculative (S).

Investment ratings are a function of Citigroup Investment Research's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating.

For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings are: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 15 December 2006 04:00 PM on the issuer's primary market.

Within the past 5 years, Citigroup Global Markets Inc. or its affiliates has acted as manager or co manager of an offering of equity securities of Bharati Shipyard Ltd.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Hyundai Heavy Industries Co Ltd, Hyundai Mipo Dockyard Co Ltd and Samsung Heavy Industries Co Ltd. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citigroupgeo.com.)

Citigroup Global Markets Inc. or its affiliates beneficially owns 5% or more of any class of common equity securities of Bharati Shipyard Ltd.

Citigroup Global Markets Inc. or its affiliates holds a long position in any class of common equity securities of Daewoo Shipbuilding & Marine Engineering, Hyundai Heavy Industries Co Ltd, Hyundai Mipo Dockyard Co Ltd and Samsung Heavy Industries Co Ltd.

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the subject company(ies) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

This Product has been modified by the author following a discussion with one or more of the named companies.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citigroup Investment Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citigroup Investment Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in Australia to wholesale clients through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992) and to retail clients through Citigroup Wealth Advisors Pty Ltd. (ABN 19 009 145 555 and AFSL No. 240813), Participants of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. If the Product is being made available in certain provinces of Canada by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. The Product may not be distributed to private clients in Germany. The Product is distributed in Germany by Citigroup Global Markets Deutschland AG & Co. KGaA, which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). Frankfurt am Main, Reuterweg 16, 60323 Frankfurt am Main. If the Product is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Product is made available in Hong Kong by The Citigroup Private Bank to its clients, it is attributable to Citibank N.A., Citibank Tower, Citibank Plaza, 3

Garden Road, Hong Kong. The Citigroup Private Bank and Citibank N.A. is regulated by the Hong Kong Monetary Authority. The Product is made available in India by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. If the Product was prepared by Citigroup Investment Research and distributed in Japan by Nikko Citigroup Ltd., it is being so distributed under license. Nikko Citigroup Limited is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Akasaka Park Building, 2-20, Akasaka 5-chome, Minato-ku, Tokyo 107-6122. The Product is made available in Korea by Citigroup Global Markets Korea Securities Ltd., which is regulated by Financial Supervisory Commission and the Financial Supervisory Service. Hungkuk Life Insurance Building, 226 Shinmunno 1-GA, Jongno-Gu, Seoul, 110-061. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, which is regulated by Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In New Zealand the Product is made available through Citigroup Global Markets New Zealand Ltd., a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 lambton Quay, Wellington. The Product is made available in Poland by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Papierów Wartościowych i Gield. Bank Handlowy w Warszawie S.A. ul. Senatorska 16, 00-923 Warszawa. The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gashka Street, 125047 Moscow. The Product is made available in Singapore through Citigroup Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in Taiwan through Citigroup Global Markets Inc. (Taipei Branch), which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. No. 8 Manhattan Building, Hsin Yi Road, Section 5, Taipei 100, Taiwan. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in United Kingdom by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in United States by Citigroup Global Markets Inc, which is regulated by NASD, NYSE and the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority. Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citigroup Investment Research's Products can be found at www.citigroupgeo.com. Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations. The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would be illegal. Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. Advice in the Product has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs.

© 2006 Citigroup Global Markets Inc. Citigroup Investment Research is a division and service mark of Citigroup Global Markets Inc. and its affiliates and is used and registered throughout the world. Citigroup and the Umbrella Device are trademarks and service marks of Citigroup or its affiliates and are used and registered throughout the world. Nikko is a registered trademark of Nikko Cordial Corporation. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST
